

### **REMARKS**

Claims 1-5 are now pending in the application. Independent Claim 1 has been amended to more particularly point out and distinctly claim the invention. Support for the amendments to Claim 1 can be found throughout the specification as originally filed, and more particularly at Page 10, line 16 bridging to Page 14, line 10, for example. The amendments to the claims do not introduce new matter. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### **REJECTION UNDER 35 U.S.C. § 103**

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hirayama et al. (WO 2004/079800 wherein citations are from US 2006/0154188 equivalent document, hereinafter "Hirayama") in view of Hada et al. (WO 2004/108780 wherein citations are from US 2007/0065748 equivalent document, hereinafter "Hada"). This rejection is respectfully traversed. Claims 1-5 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogata et al. (WO 2004/088428 wherein citations are from US 2006/0166130 equivalent document, hereinafter "Ogata") in view of Hada. This rejection is respectfully traversed.

Independent Claim 1 has been amended to recite a photoresist composition that includes at least one polymer selected from Formulas (3), (4), and/or (5). The claimed photoresist compositions are not rendered obvious over the cited art. As admitted by the Examiner, none of the cited references teach the specific polymer component and acid generating component, as claimed. Nor do any of the cited references provide any apparent reason to incorporate both a polymer component (A), including at least one polymer represented by Formulas (3), (4), and/or (5) with the acid generating component (B) represented by Formula (1). Nothing in the cited art provides any apparent reason or motivation to combine the specific acid generating component with

the specific polymer component, as claimed. As described in Applicants' specification, the claimed composition improves potential defects or flaws otherwise resulting in a photolithography process using resist compositions, by improving compatibility with fine patterns and maintaining high resolving ability. Specifically, the claimed photoresist compositions improve rectangular configurations and film reduction. See for example, Applicants' Specification at Page 4, lines 6-23.

In cases involving new chemical compounds, it remains necessary to identify some reason that would have led a chemist to modify a known compound in a particular manner to establish a *prima facie* obviousness of a new claimed compound. *Takeda Chem. Ind. v. Alphapharm Pty., Ltd*, 2007 WL 1839698 \*5 (Fed. Cir. June 28, 2007). Additionally, even where there is structural similarity between the compounds of the prior art and the claimed invention, a *prima facie* case of obviousness also requires a showing that "the prior art would have suggested making the specific molecular modifications necessary to achieve the claimed invention." *Takeda*, 2007 WL 1839698 at \*4-5 (*citations omitted*). None of the cited references provide the necessary motivation to arrive at the claimed compounds to establish a *prima facie* case of obviousness. More specifically, neither Hirayama, Ogata, nor Hada provide any apparent reason or motivation to one of skill in the art to modify the described polymers in such a manner that might arrive at the claimed synthetic structures.

The Hirayama reference does not suggest combining a polymer component (A) as claimed, including at least one polymer selected from those polymers represented by Formulas (3), (4), and/or (5) with the acid generating component (B) represented by Formula (1) for a photoresist composition. Hirayama fails to suggest combining an acid generating group with a superior polymer component. While the Examiner cites Paragraph [206] of Hirayama, this portion of the reference pertains to using a coating solution of a protective film applied over the previously applied photoresist coating, but has no suggestion to include an acid generating component in a photoresist composition. See e.g., Hirayama, Paragraphs [201], [206], and [207].

The Hada reference similarly fails to describe or suggest the claimed photoresist composition. While Hada describes using a variety of acid generator groups, ranging from onium salts (b-0) to iminosulfonate-based compounds (b-1), (b-2), there is no guidance to one of skill in the art to arrive at the specific composition as claimed, namely a compound where the acid generating component is represented by Formula (1) in combination with the polymer component having at least one polymer represented by Formulas (3)-(5). The claimed invention is non-obvious, even where the teachings of Hirayama are combined with those of Hada, because the cited references fail to provide any apparent reason to arrive at the claimed composition and thus fail to establish a *prima facie* case of obviousness.

The Ogata reference similarly fails to provide any apparent reason to use the claimed acid generating component (B) represented by Formula (1). The Ogata does not suggest the claimed mixture of polymer (A), nor does Ogata suggest combining such a polymer component with the acid generator component (B) having Formula (1). Ogata fails to provide any teaching or suggestion related to the beneficial effects achieved by the claimed photoresist compositions. For the reasons set forth above, Hada does not account for these deficiencies. As such, the combination of Ogata with Hada fails to establish a *prima facie* case of obviousness. As such, Applicants respectfully submit that the invention set forth in independent Claim 1 and its dependent Claims 2-5 is non-obvious and request reconsideration and allowance thereof.

#### **CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

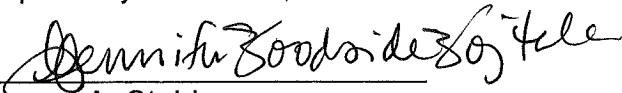
Application No. 10/581,777  
Amendment dated September 27, 2007  
Reply to Office Action of June 27, 2007

Docket No.: 9084-000003/US/NP

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0750, under Order No. 9084-000003/US/NP from which the undersigned is authorized to draw.

Dated: September 27, 2007

Respectfully submitted,

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